## SUCCESS STORY

## Hero Scientist Protects Afghan Heritage

USAID builds Afghan capacity for environmental research and assessment.



A student intern at Kabul University carefully cleans and documents plant specimens.

USAID programs are helping Afghans to improve natural resource management, preserve biodiversity, and ensure sustainable development. In Afghanistan, everyday heroes risked their lives during periods of violence and repressive rule to preserve their country's heritage. To one professor in the Biology Department at Kabul University, each day under the Taliban regime must have held a unique degree of terror as he transferred the university's extensive herbarium (a collection of preserved plant specimens), piece by piece, to his home for protection. When the Taliban fell, he returned this precious scientific treasure to the university. It remained there for years, in a dusty storeroom, waiting to be restored.

When USAID implementing partners UC Davis and Texas A&M University (PEACE Project) rediscovered the collection in March 2009, scientists were astounded at the number and variety of plant specimens. They determined that despite damage incurred, most of the 25,000 specimens were still in good condition and could be restored. Once restored, photographed, and entered into a database, they would provide the best baseline data for Afghanistan's flora available anywhere in the world.

USAID's PEACE Project formed a consortium with three other partners (Wildlife Conservation Society, ECODIT-Biodiversity Support Program for the National Environmental Protection Agency, and the Purdue University-A4 Project) to restore the collection. The Royal Botanical Garden of Edinburgh agreed that after the collection is digitized, it should be entered into an existing virtual collection and made available on-line.

The potential impact of the restored herbarium is enormous. Researchers in Afghanistan will now be able to implement environmental impact assessments not previously possible due to a lack of data. Specialists will be able to design natural resources management and rehabilitation measures using data specific to the areas for which they are planned. Afghanistan will be able to better meet its obligations under international environmental conventions. The identification and preservation of protected areas will be improved due to the increased ability to identify sites with unique, rare, or endemic specie assemblages. Finally, international research on Afghanistan's flora will be enhanced.

What makes the Biology Department professor truly proud, however, is that for the first time in several decades, Kabul University faculty and students will be able to use the herbarium for training, teaching, and research – the purposes for which it was originally intended.